CHAPTER 15: MASTER CLAMP/LOADING SECTION

CONTENTS

1. Theory of Operation

1. Master Making Unit Set Mechanism 1
2. Master Tension Plate Home Positioning Mechanism 2
3. Master Positioning Mechanism 4
4. Master Feeding Mechanism 6
5. Clamp Plate Master Clamp Mechanism 8
6. Master Loading on the Drum Mechanism 10
7. Master Tension Plate Lifting Mechanism 12
8. Master Advance after Master Cutting 14

2. Removal and Assembly

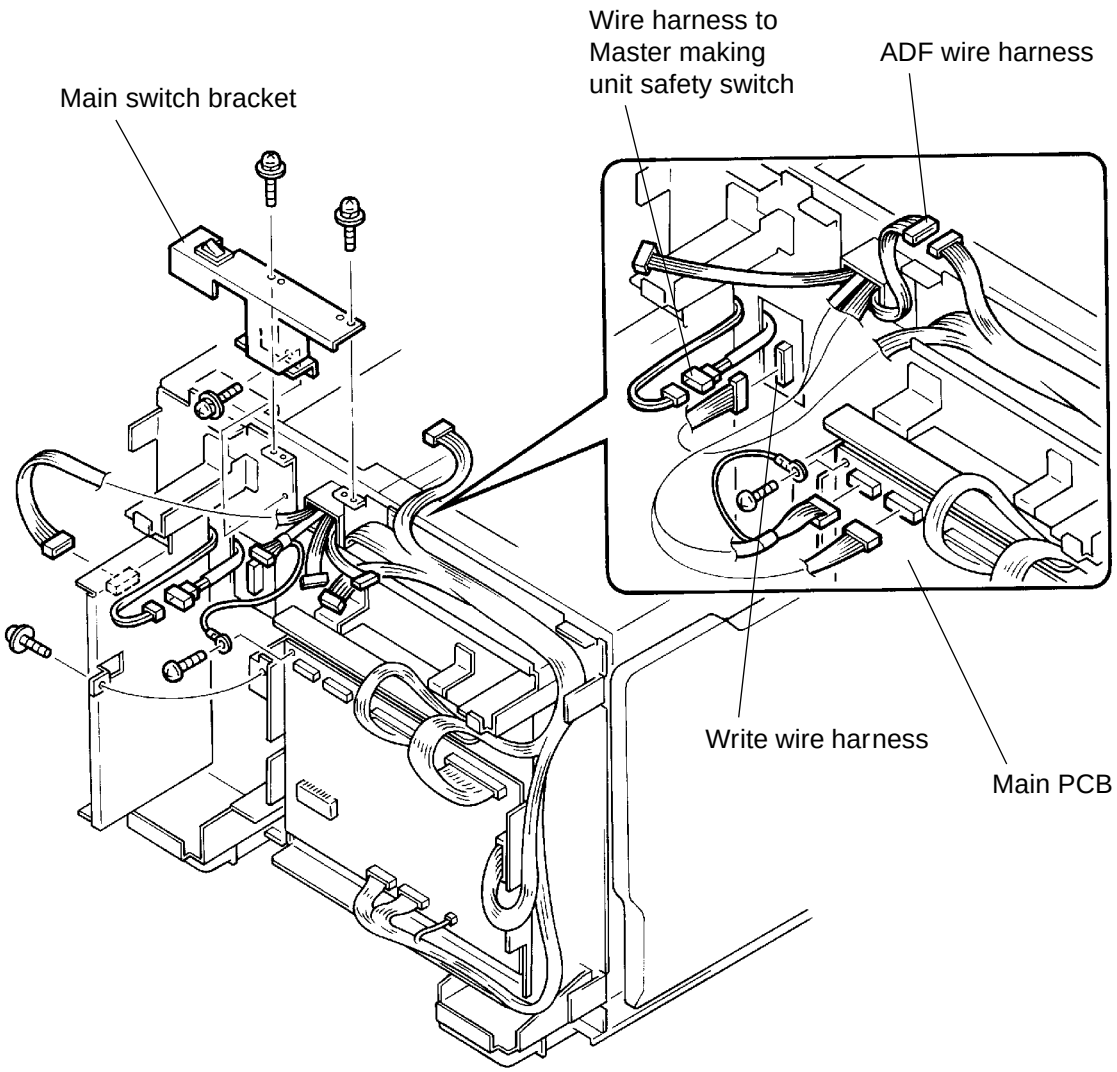
1. Master Making Unit 17
2. Master Making Unit Set Switch 19
3. Write Pulse Motor 20
4. Master Making Upper Unit 21
5. Master Positioning Sensor 23
6. Master Tension Plate Sensor 24
7. Master Loading Clutch 25
8. Master Tension Plate Solenoid 25
9. Master End Sensor 26

2. Removal and Assembly

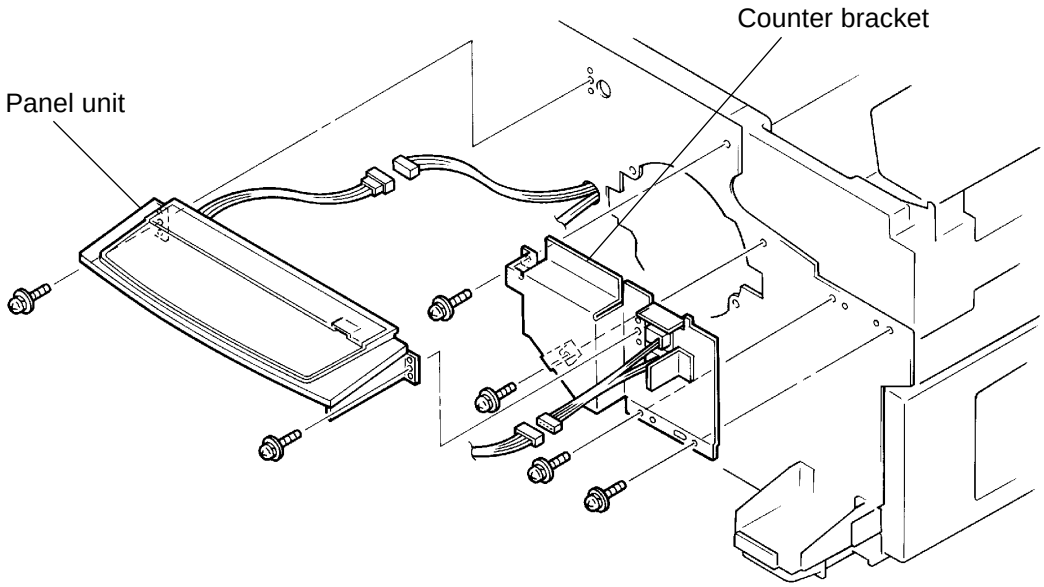
1. Master Making Unit

1. Remove Drum from the machine.
2. Disconnect the power supply from the machine.
3. Remove following six covers.
   - Back cover, Front cover, Master removal upper cover, ADF cover, ADF unit cover, and Master making unit cover.
4. Open the Power supply PCB bracket frame.
5. Disconnect Connectors of following three parts.
   - ADF wire harness, Master making unit safety switch, and Write pulse motor.
6. Remove three mounting screws of the Main switch bracket and slide the bracket out.

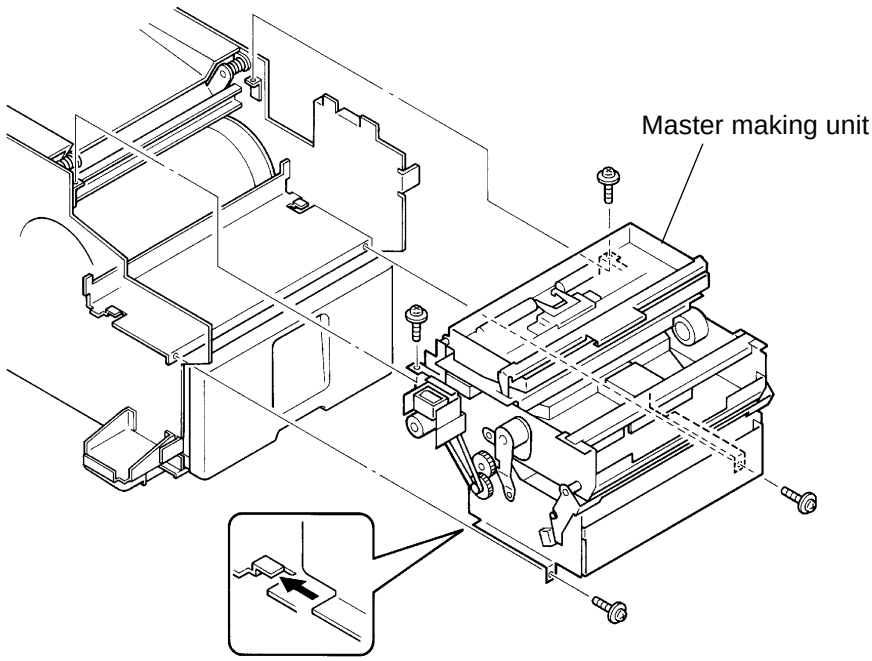
(continues on page 15-18)



7. Disconnect the connector on the Operation panel unit and remove two mounting screws and remove the panel unit.
8. Disconnect the Connector of the Counter.
9. Remove four mounting screws of the Counter bracket and remove the bracket with the Counter attached.



10. Remove four mounting screws of the Master making unit and remove the unit from the machine.

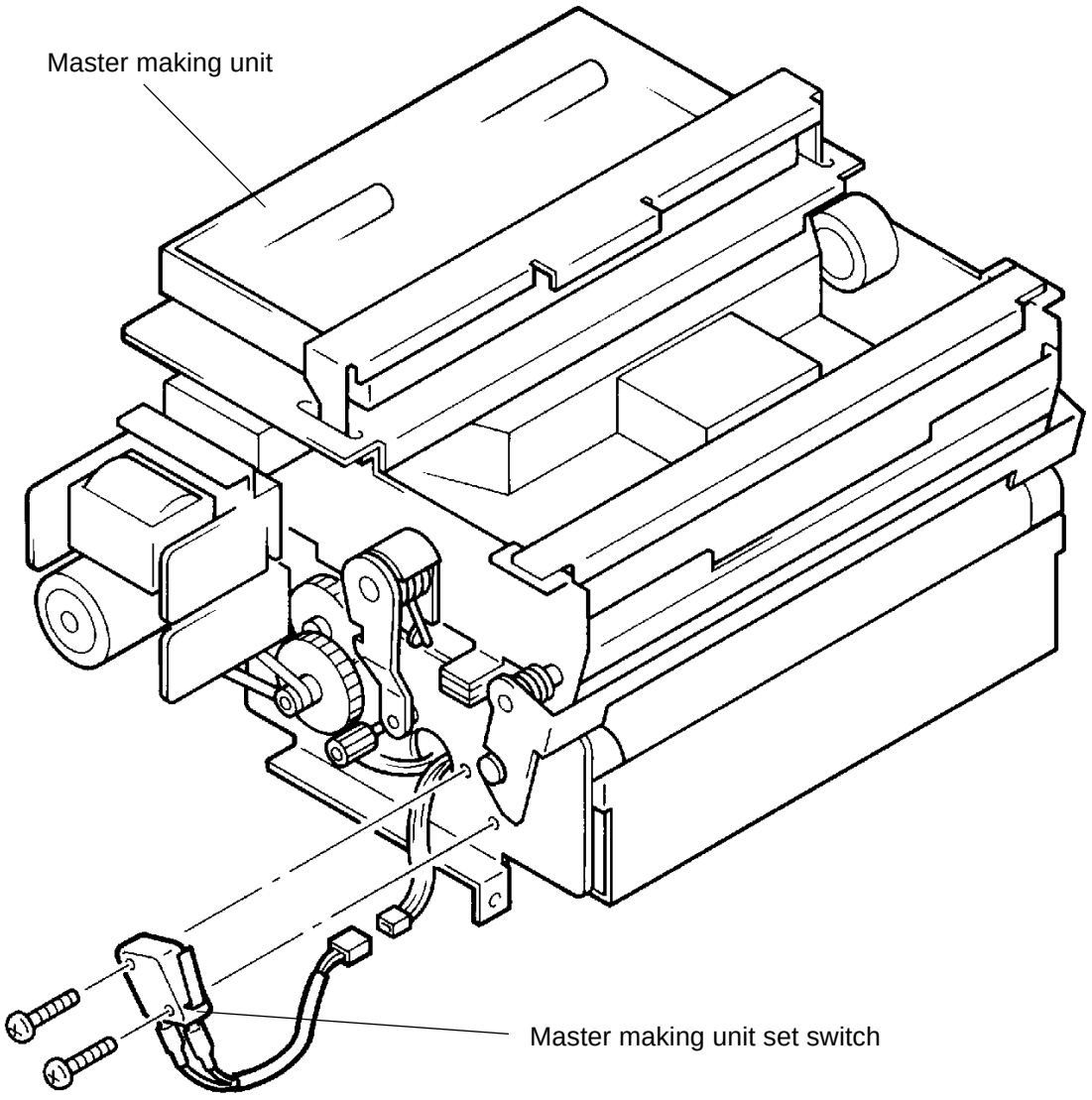


Precaution in Assembly

- Hook the Master making unit on under the catch on the machine frame.
- Match the half-pierced section of the Counter bracket with its counter part.

2. Master Making Unit Set Switch

1. Remove Drum from the machine.
2. Disconnect the power supply from the machine.
3. Remove following six covers.
   - Back cover, Front cover, Master removal upper cover, ADF cover, ADF unit cover, and Master making unit cover.
4. Remove Master making unit. (page 15-17)
5. Disconnect the Connector of the Master making unit set switch.
6. Remove two mounting screws of the Master making unit set switch and remove the switch.

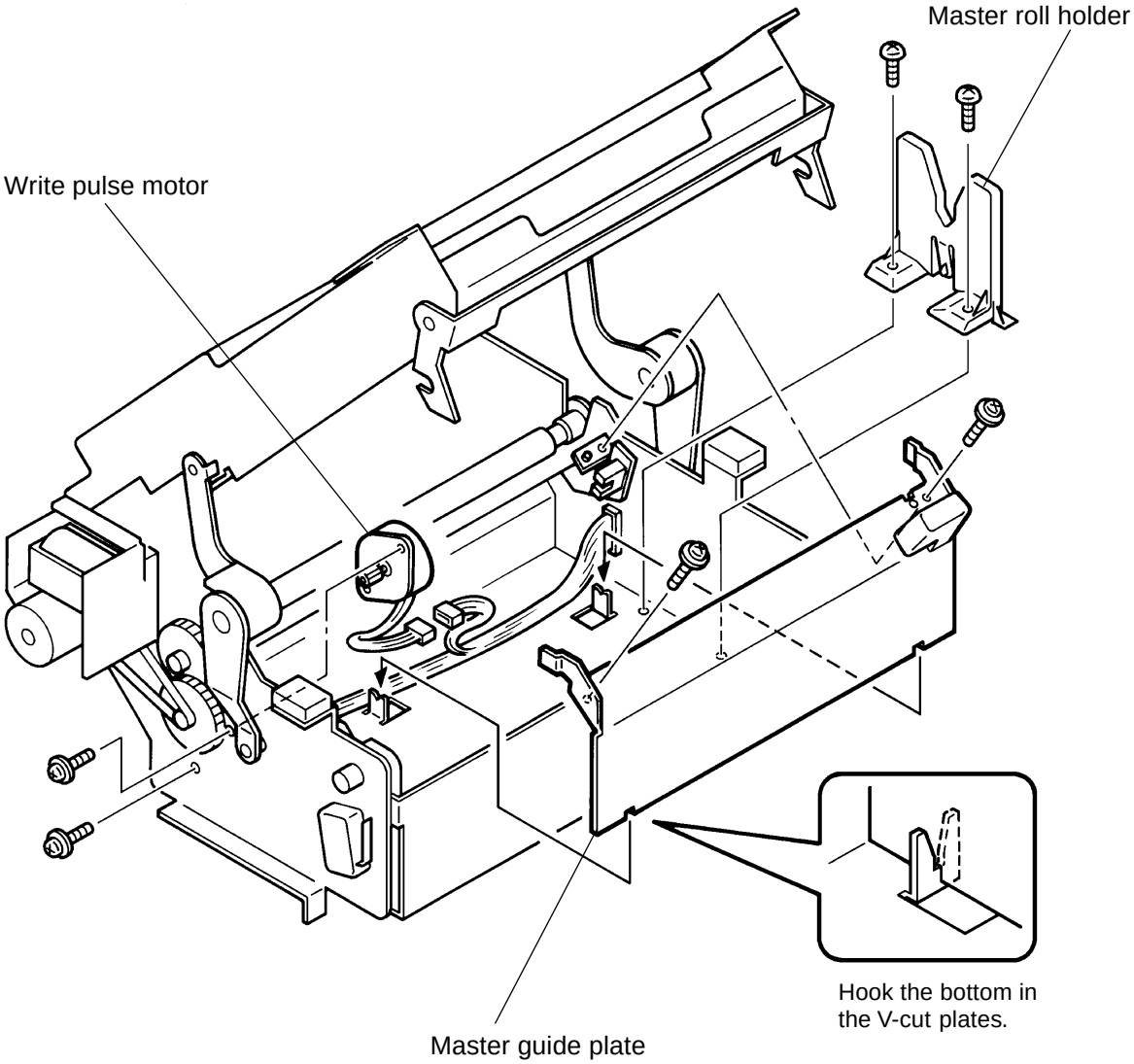


3. Write Pulse Motor

1. Remove Drum from the machine.
2. Disconnect the power supply from the machine.
3. Remove following six covers.
   • Back cover, Front cover, Master removal upper cover, ADF cover, ADF unit cover, and Master making unit cover.
4. Remove Master making unit. (page 15-17)
5. Remove two mounting screws of either one of the Master roll holder and remove the holder.
6. Remove two mounting screws of the Master guide plate and remove the plate.
7. Disconnect the Connector of the Write pulse motor.
8. Remove two mounting screws of the Write pulse motor and remove the motor.

Precaution in Assembly

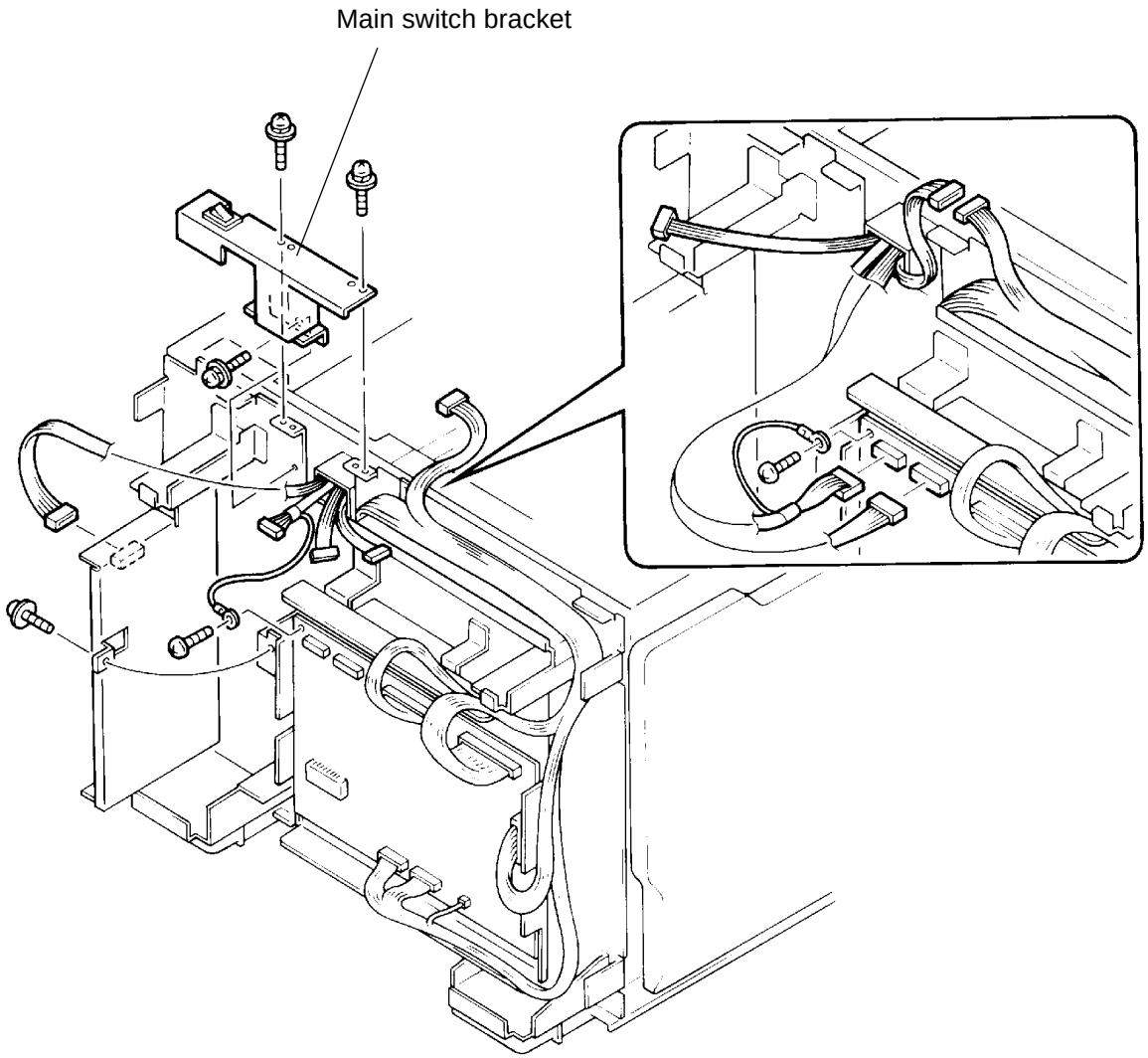
• Match the half-pierced section of the Master guide plate with its counter part and hook its bottom in the V-cut plates.



4. Master Making Upper Unit

1. Disconnect the power supply from the machine.
2. Remove following five covers.
   • Back cover, Master removal upper cover, Master removal lower cover, ADF cover, and ADF unit cover.
3. Remove Master removal unit. (page 11-13)
4. Disconnect two Connectors from the Main PCB, one ground wire, and Connector of ADF wire harness.
6. Disconnect the Connectors from the Power supply PCB and open the Power supply PCB bracket frame.
7. Remove three mounting screws of the Main switch bracket and lift the bracket, and push it aside.

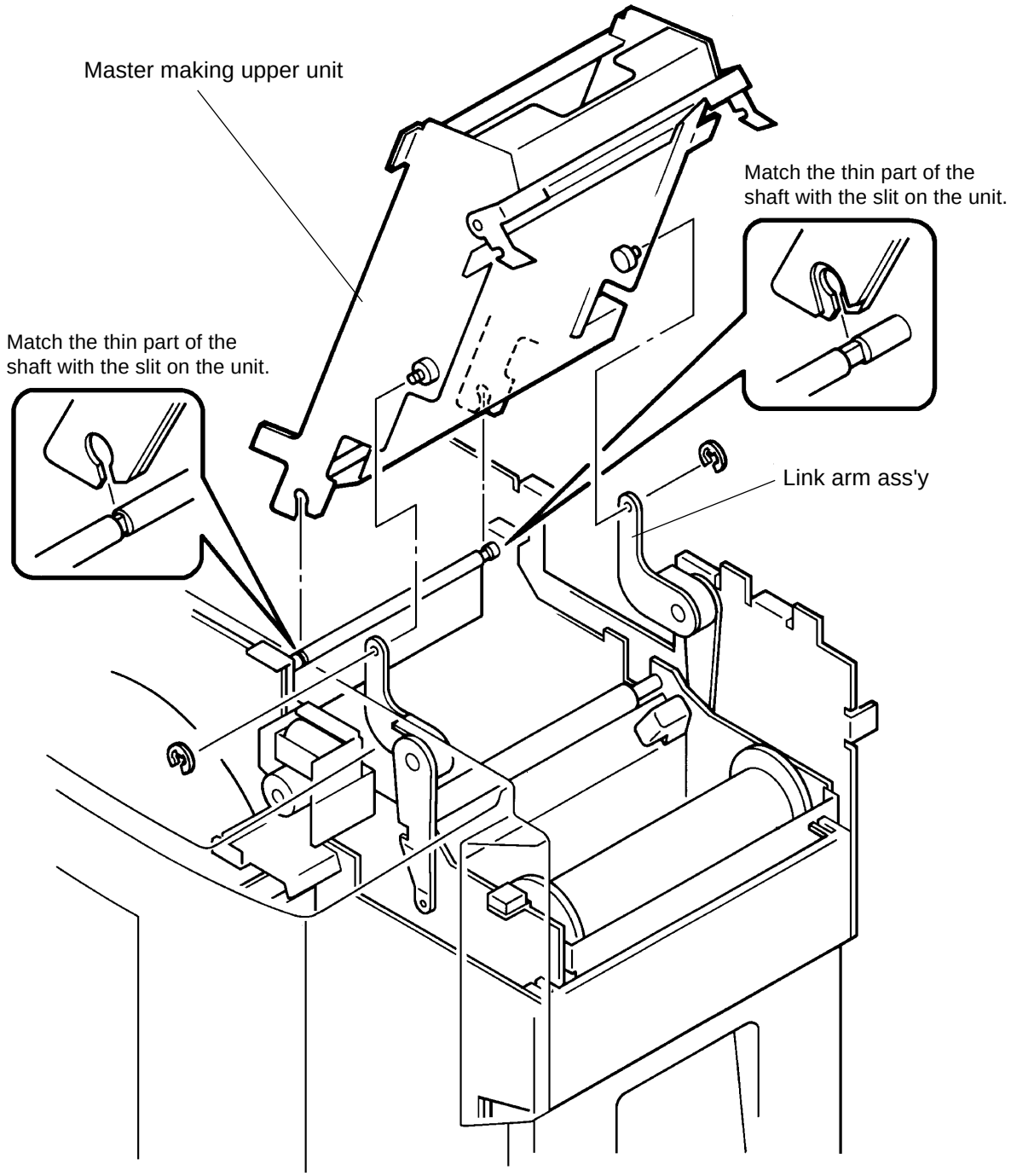
(continues on page 15-22)



8. Remove E-rings from both Link arms and remove the Master making upper unit by lifting it upwards.
   The unit lifts out when the slit on the unit is aligned with the thin part of the shaft.

Precaution in Assembly

- When attaching the Master making upper unit onto the machine, slide the unit on the shaft by matching the thin part of the shaft with the slit on the unit.
  (It is easier to attach the Master making upper unit on the machine if the Operation panel side of the unit is attached first.)

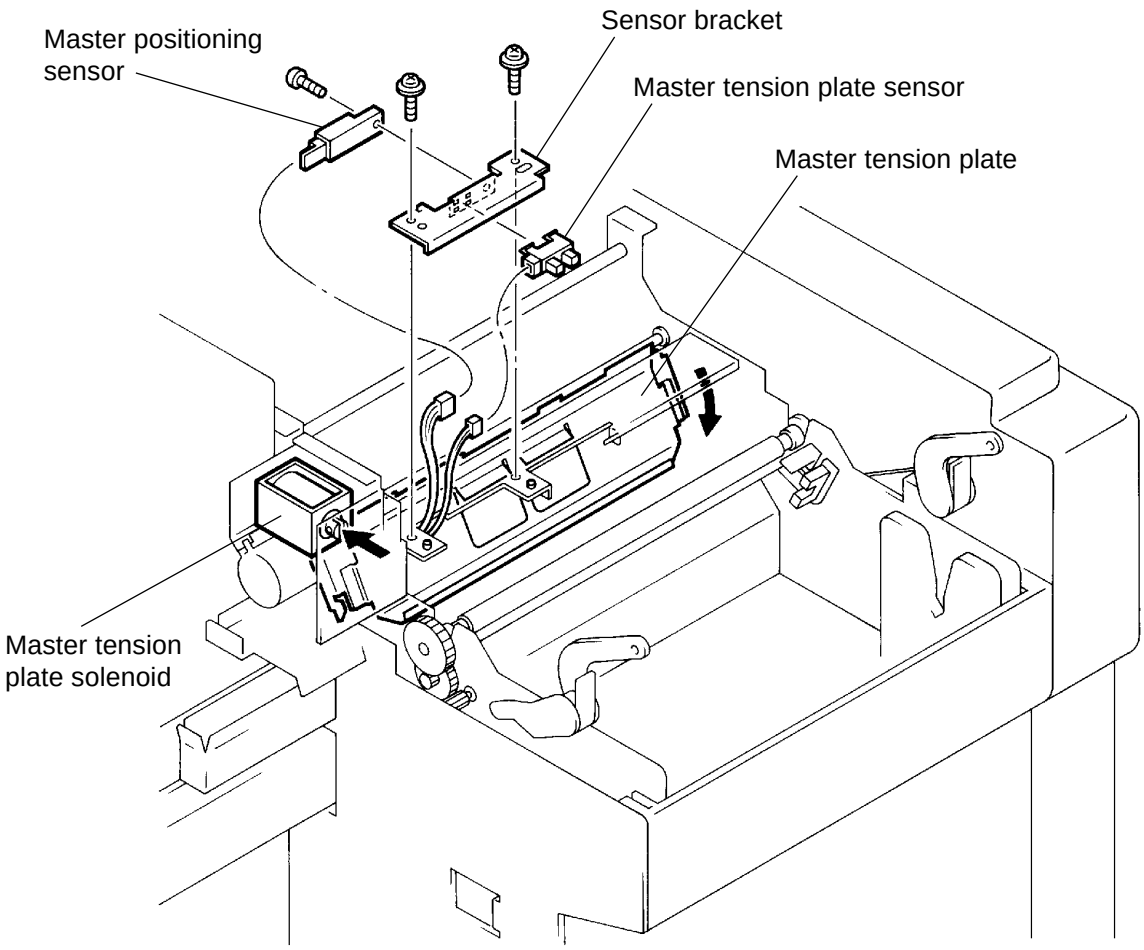

Master making upper unit
Match the thin part of the shaft with the slit on the unit.
Match the thin part of the shaft with the slit on the unit.
Link arm ass'y

5. Master Positioning Sensor

1. Remove Drum from the machine.
2. Disconnect the power supply from the machine.
3. Remove following six covers.
   - Back cover, Front cover, Master removal upper cover, Master removal lower cover, ADF cover, and ADF unit cover.
4. Remove Master removal unit. (page 11-13)
5. Remove Master making upper unit. (page 15-21)
6. Remove Operation panel. (page 15-18)
7. Press the plunger of the Master tension plate solenoid by hand and swing the guide down.
8. Remove two mounting screws of the Sensor bracket.
9. Lift the Sensor bracket with the Master positioning sensor and Master tension plate sensor attached, and disconnect the Connectors from these two sensors.
10. Remove the mounting screw of the Master positioning sensor and remove the sensor from the Sensor bracket.

Precaution in Assembly

- Match the half-pierced section of the Sensor bracket with its counter part.

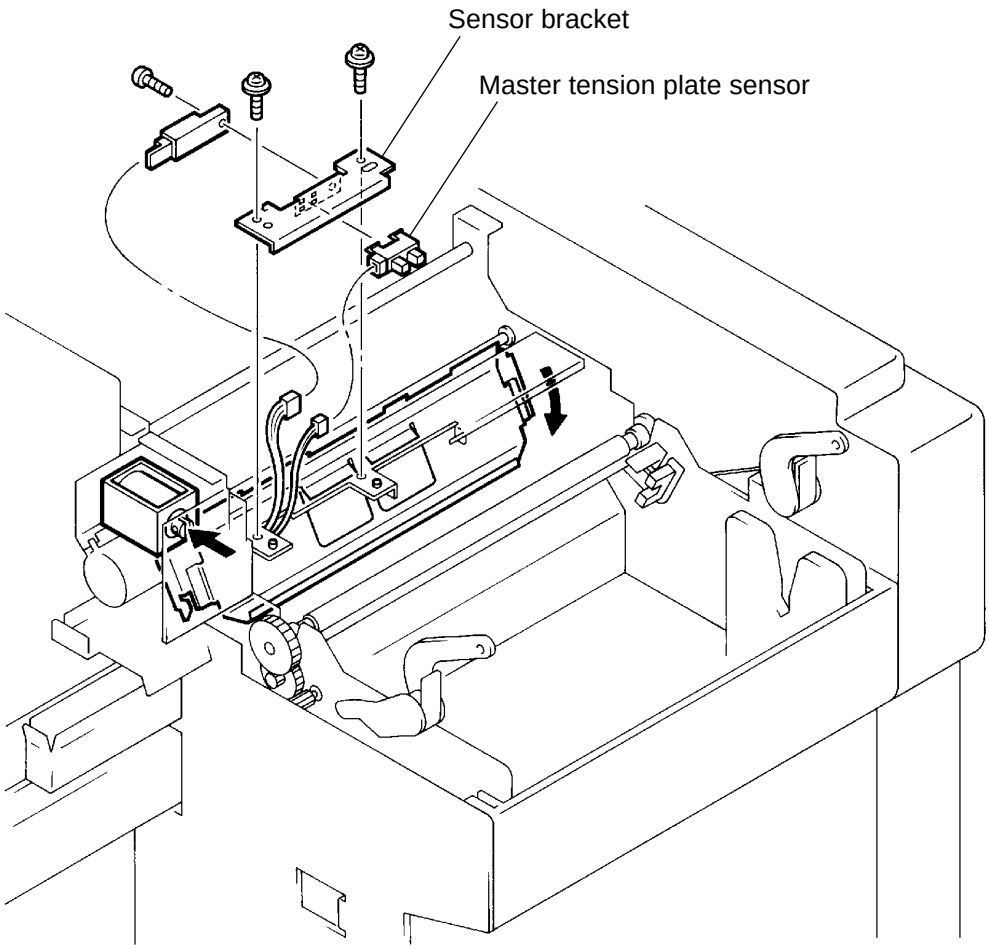


6. Master Tension Plate Sensor

1. Remove the Sensor bracket referring to the previous page.
2. Unlock the Master tension plate sensor from the Sensor bracket, carefully not to break the plastic mounting hooks of the sensor.

Precaution in Assembly

• Match the half-pierced section of the Sensor bracket with its counter part.

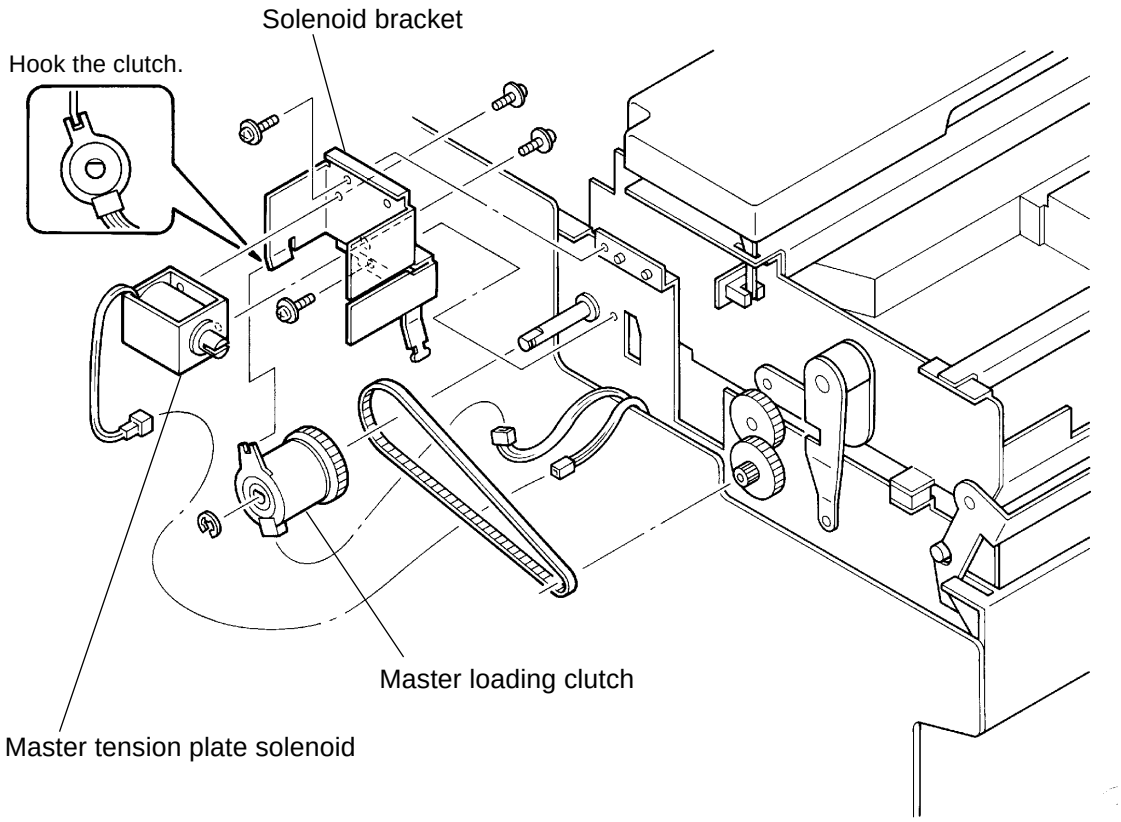


7. Master Loading Clutch

1. Remove Drum from the machine.
2. Disconnect the power supply from the machine.
3. Remove Front cover.
4. Remove Operation panel. (page 15-18)
5. Remove the Belt and E-ring from the Master loading clutch, and remove the clutch.

Precaution in Assembly

- Match the flat cut portion of the Loading roller shaft and that of Master loading clutch.
- Hook the Master loading clutch on the frame of the machine to prevent the clutch from rotating.

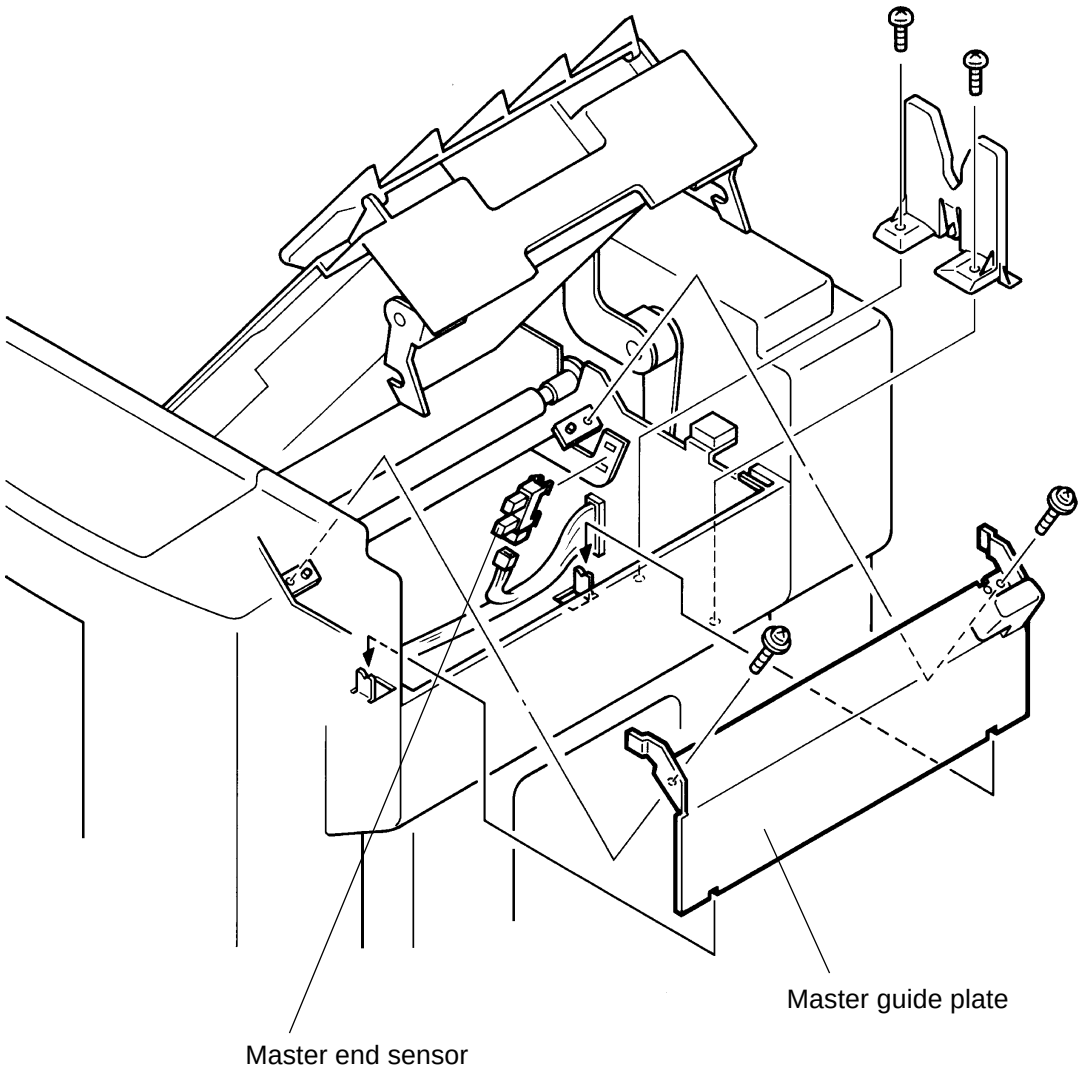


8. Master Tension Plate Solenoid

1. Remove the Master loading clutch referring to above instructions.
2. Disconnect the Connector of the Master tension plate solenoid.
3. Remove two mounting screws of the Master tension plate solenoid bracket and remove the bracket.
4. Remove the two mounting screws of the Master tension plate solenoid and remove the solenoid from the bracket.

9. Master End Sensor

1. Disconnect the power supply from the machine.
2. Open the Master making unit and remove the master roll.
3. Remove two mounting screws of either one of the Master roll holder and remove the holder.
4. Remove two mounting screws of the Master guide plate and remove the plate.
5. Disconnect the Connector of the Master end sensor and remove the sensor from the sensor bracket on the machine.

Precaution in Assembly

- Match the half-pierced section of the Master guide plate with its counter part.
- Hook the Master roll holder properly on the machine before screwing it down.